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10/017,055	12/14/2001	Keith L. Shippy	884.602US1	6579

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EXAMINER

DINH, KHANH Q

ART UNIT	PAPER NUMBER
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2151

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05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/017,055

Applicant(s)

SHIPPY ET AL.

Examiner

Khanh Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28, 30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28, 30 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Request for Reconsideration filed on 2/12/2007. Claims 1-28, 30 and 32 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 7 and 9-28, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al., (Publication number US-2001/0032258 A1) (hereafter Ishida) in view of Laursen, US pat. No.6,895,234.

As to claim 1, Ishida discloses a system for detecting and deterring rollback attacks, comprising:

a variable time period (VTP) (time of access), a time duration to a next connection (TDNC) and an access log (using URL access log, see fig.1, Paragraph (para). [0075] to para [0078]);

a server (update server s9 fig.1) to transmit the variable time period (VTP) and the time duration to the next connection (TDNC) and to verify the access log (storing access information from clients at the update server, see para [0079] to para [0083]); and

the client additionally to connect and to connect to the server after the time duration to the next connection (TDNC) (see fig.6, para [0086] to para [0093] and para [0097] to para [0102]).

Ishida does not specifically disclose a client to forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed on the client. However, Laursen discloses a client to forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed on the client (see abstract, fig.5b, col.6 line 41 to col.7 line 37 and col.12 line 25 to col.13 line 67). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Laursen's teachings into the computer system of Ishida to update user information because it would have managed efficiently a personal account and solved the problems of inconvenient data entry in a communication network.

As to claim 2, Ishida discloses the client is a personal computer (PC) (user terminal 4 fig.1) (see [0071] to [0074]).

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As to claim 7, Ishida further discloses a media content provider (see para [0137] to [0145] and [0150] to [0154]).

As to claim 9, Ishida further discloses the access log is used for billing (see para [0096] to [0102] and [0107] to [0119]).

As to claim 10, Ishida discloses a method for detecting and deterring rollback attacks, comprising:

establishing a shared secret between a client and a server and transmitting, by the server to the client, a variable time period (VTP) and a time duration to a next connection (TDNC) (using URL access log, see fig.1, Paragraph (para) [0075] to para [0079]).

updating, by the client, an access log approximately every variable time period (VTP) and initiating, by the client to the server, a connection approximately after the time duration to the next connection (TDNC) (storing access information from clients at the update server, see para [0079] to para [0083]);

transmitting, by the client to the server, the access log and verifying, by the server, the access log (see fig.6, para [0086] to para [0093] and para [0097] to para [0102]).

Ishida does not specifically disclose forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed from the storage device. However, Laursen discloses forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed from the storage device (see abstract, fig.5b, col.6 line 41 to col.7 line 37 and col.12 line 25 to col.13 line 67). It would have been obvious to

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one of the ordinary skill in the art at the time the invention was made to implement Laursen's teachings into the computer system of Ishida to update user information because it would have managed efficiently a personal account and solved the problems of inconvenient data entry in a communication network.

As to claim 11, Ishida discloses establishing a new shared secret between the client and the server each time the client connects to the server (see fig.9, [0086] to [0093] and 0096] to [0102]).

As to claims 12 and 13, Ishida discloses establishing a new variable time period (VTP) and a new time duration to a next connection (TDNC) each time the client connects to the server and incrementing, by the client, a counter, after each update to the access log (see fig.9, [0086] to [0093] and 0096] to [0102]).

As to claims 14 and 15, Ishida discloses automatically detecting an anomaly and decreasing the variable time period (VTP), upon detecting an anomaly (see [0086] to [0093] and [0130] to [0145]).

As to claims 16 and 17, Ishida discloses decreasing the time duration to a next connection (TDNC), upon detecting an anomaly and encrypting the access log (see [0086] to [0093] and [0130] to [0145]).

As to claims 18 and 19, Ishida discloses each entry in the access log is encrypted and the access log is re-created each time the client connects to the server (see [0097] to 0109] and [0130] to [0145]).

As to claim 20, Ishida discloses a machine for detecting and deterring rollback attacks, comprising:

a processor (s9 fig.1) and a storage device (16 fig.1) coupled to the processor;

a background component storable on the storage device and executable on the processor to update an access log approximately every variable time period (VTP) (using URL access log, see fig.1, Paragraph (para) [0075] to para [0079]);

a content player component storable on the storage device and executable on the processor to update the access log to indicate content provided (storing access information from clients at the update server, see para [0079] to para [0083]);

Ishida does not specifically disclose forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed from the storage device.

However, Laursen discloses forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed from the storage device (see abstract, fig.5b, col.12 line 25 to col.13 line 67). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Laursen's teachings into the computer system of Ishida to update user information because it would have managed efficiently a personal account and solved the problems of inconvenient data entry in a communication network.

Claims 21 and 22 are rejected for the same reasons set forth in claims 17 and 18 respectively.

As to claims 23 and 24, Ishida discloses a communication component capable of connecting to a server approximately after a time duration to a next connection (TDNC) and transmitting the access log (see fig.9, [0086] to [0093] and 0096] to [0102]).

As to claim 25, Ishida discloses receiving a new variable time period (VTP) and a new time duration to the next connection (TDNC) (see [0086] to [0093] and [0130] to [0145]).

As to claims 26 and 27, Ishida discloses the communication component is capable of receiving a new access log and decrypting the new access log (see [0086] to [0093] and [0130] to [0145]).

As to claim 28, Ishida discloses a machine-accessible medium having associated content capable of directing the machine to perform a method of detecting and deterring rollback attacks, the method comprising:

initiating, by a client, a connection with a server and transmitting , by the client, the old access log to the server (see abstract, fig.1, [0071] to [0075]);

receiving, by the server, the old access log and inspecting, by the server, the old access log (see [0075] to [0078] and [0082] to [0086]);

transmitting, by a sender (user terminal 4 fig.1), a new access log (using URL access log, see fig.1, Paragraph (para) [0075 to para [0086;

transmitting, by the server (s9 fig.1), a new variable time period (VTP) and a new time duration to the next connection (TDNC) (storing access information from clients at the update server, see para [0079] to para [0087]);

receiving, by the client, the new access log and receiving, by the client, the new VTP and the new TDNC (see [0088] to [0095]);

storing, by the client, the new access log, the new VTP and the new TDNC (see [0096] to [0102]).

Ishida does not specifically disclose forcibly updating by a client, the new access log during every new VTP. However, Laursen discloses forcibly updating by a client, the new access log during every new VTP (see abstract, fig.5b, col.6 line 41 to col.7 line 37 and col.12 line 25 to col.13 line 67). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Laursen's teachings into the computer system of Ishida to update user information because it would have managed efficiently a personal account and solved the problems of inconvenient data entry in a communication network.

As to claim 30, Ishida discloses establishing, by the server, a shared secret with a client (user), decrypting, by the server (update server s9 fig.1), the access log and encrypting, by the server, the new access log; and encrypting, by the server, the new variable time period (VTP) and the new time duration to the next connection (TDNC) (see [0086] to [0093] and [0130] to [0145].

As to claim 32, Ishida discloses establishing, by a client, a shared secret with the server; encrypting, by the client, the access log; decrypting, by the client, the new access log; and

decrypting, by the client, the new variable time period (VTP) and the new time duration to the next connection (TDNC) (see [0086] to [0093] and [0130] to [0145]).

4. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida and Laursen and further in view of Coddington et al., US pat. No.5,410,343 (hereafter Coddington). As to claims 3-6, Ishida's teachings still applied as in item 4 above. Neither Ishida nor Laursen specifically discloses using a set-top box, a video home server, a pay-per-view video server and a video-on-demand server. However, Coddington discloses using a set-top box, a video home server, a pay-per-view video server and a video-on-demand server (see abstract, figs.1, 2, col.5 line 8 to col.6 line 42 and col.9 line 38 to col.10 line 61). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Coddington's teachings into the computer system of Ishida to distribute data information in a communications network because it would have provided direct data transfer between the customer's premises and the associated Video Information Provider to support interactive video programming and presentations in a communications network (see Coddington's col.10 lines 1-39).

5. Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida and Laursen and further in view of Elgamal, US pat. No.5,671,279 (hereafter Elgamal). As to claim 8, Ishida's teachings still applied as in item 4 above. Neither Ishida nor Laursen discloses using a Secure Authenticated Channel (SAC) connection. However, Elgamal disclose using a Secure Authenticated Channel (SAC) connection (providing a secure authenticated

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channel for all communications between the Merchant and the Acquirer Gateway to secure all messages exchanged properly, see abstract, fig.1, col.20 line 59 to col.21 line 17). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Elgamal's teachings into the computer system of Ishida to provide secure data transactions because it would have provided a secure communications between the merchant and Gateway and to protect account information from the merchant in the Internet (see Elgamal's col.20 lines 52-64).

Response to Arguments

6. Applicant's arguments filed on 2/17/2007 have been fully considered but they are not persuasive.

- Applicant asserts that the cited reference does not disclose a VTP as defined as "a piece of data representing a time period that is chosen by a server and transmitted to a client".

Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a piece of data representing a time period that is chosen by a server and transmitted to a client as VTP) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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- Applicant asserts that the cited reference does not disclose a VTP (i.e., a time period).

Examiner respectfully point out that Ishida discloses the VTP (using time of access of users such as connection start and end time data, see fig.1, Paragraph (para). [0075] to para [0078]).

- Applicant asserts that the cited reference does not disclose forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed on the client.

Examiner respectfully point out that Laursen discloses forcibly update the access log approximately every variable time period (VTP) regardless of whether data is accessed on the client (using the PC can update information stored in the account when the supplied username and password are verified; If the username and password are not acceptable, the subprocess submitState returns to the phone with a corresponding message being either "You must enter a name" or "You must enter a password." Otherwise, the newly entered username and password are sent to another subprocess called SetUserAuth() in a process called HTTPDBMSUserDB. The subprocess SetUserAuth updates the username and password in the account structure, which immediately requires all subsequent logins to the rendezvous with the newly supplied username and password. A subprocess Authenticate examines a set of a username and password supplied by the PC and compares the username and password from the PC to the ones in the account structure. If the comparison is

successful, the subprocess Authenticate returns a AuthPass flag that allows the PC 110 to access the account in the database. Otherwise, it returns a flag that denies the admission of the PC 110 to the account. The information process requires users to update name and information, see abstract, fig.5b, col.6 line 41 to col.7 line 37 and col.12 line 25 to col.13 line 67).

As a result, cited prior art does disclose a system and method detecting and deterring rollback attack, as broadly claimed by the Applicants. Applicants clearly have still failed to identify specific claim limitations that would define a clearly patentable distinction over prior art.

Conclusion

7. Claims 1-28, 30 and 32 are rejected.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (571) 272-3939. The fax phone number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khanh Dinh
Primary Examiner